

4/23/2013 2:01 PM

DOCKET NO. D-2013-004-1

DELAWARE RIVER BASIN COMMISSION

Drainage to Special Protection Waters

**Transcontinental Gas Pipe Line Company, LLC
Northeast Supply Link Project - Palmerton Loop**

Ross Township, Monroe County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by URS Corporation on behalf of Transcontinental Gas Pipe Line Company, LLC (Transco or docket holder) on February 14, 2013 (Application), for approval of a one-time, temporary discharge of wastewater resulting from the hydrostatic testing of a portion of the Northeast Supply Link Project referred to as the Palmerton Loop. The Federal Energy Regulatory Commission (FERC) prepared an Environmental Assessment dated August 2012 for the project. FERC issued its Order Issuing Certificate and Granting Abandonment Docket No. CP12-30-000 and issued its Certification of Public Convenience and Necessity on November 2, 2012. The United States Army Corps of Engineers and Pennsylvania Department of Environmental Protection issued a Pennsylvania State Programmatic General Permit for the project on February 11, 2013. The Monroe County Soil Conservation District approved an Erosion and Sediment Control General Permit for the project on October 25, 2012. Additional regulatory agencies have reviewed and subsequently issued approvals for the project as described within this docket.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Monroe County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on May 7, 2013.

A. DESCRIPTION

1. Purpose. The purpose of this docket is for approval of the installation of 3.17 miles of new, 42-inch diameter steel natural gas transmission pipeline (the Northeast Supply Link (NSL) - Palmerton Loop”) parallel to the docket holder’s existing Leidy Gas Line to provide additional capacity and to discharge up to 1.418 million gallons (mg) of water used for pipe cleaning and hydrostatic testing at one surface water and up to two land surface discharge locations. The

docket also approves a temporary surface water withdrawal totaling up to 1.774 mg of water for Direct Pipe operations (0.356 mg), internal pipe cleaning (0.072 mg) and hydrostatic testing (up to 1.346 mg) associated with the docket holder's Palmerton Loop project. The docket also describes other associated activities and facilities of the project including, surface water withdrawals, stream crossings, disturbance on wetlands and floodplains, and the installation a new 16,000-hp gas turbine compressor unit at existing Compressor Station 515 in Buck Township, Luzerne County, Pennsylvania.

2. Location. Transco is expanding segments of the existing Leidy Line, which extends west to east from Potter County in north central Pennsylvania to Hunterdon County, New Jersey. A 3.17 mile segment of the pipeline expansion, referred to as the Palmerton Loop, is located within the Delaware River Basin. The Palmerton loop begins at a point approximately 0.25 miles west of the intersection of Tittle and Mountain Roads (Leidy Mile Post [M.P.] 40.5) and extends northwest over Chestnut Ridge parallel to Transco's existing Leidy Pipeline to a point approximately 0.2 miles south of Meixell Valley Road (M.P. 43.87) in Ross Township, Monroe County, Pennsylvania.

The specific start and end points of the Palmerton Loop are as follows:

PALMERTON LOOP	TRANSCO MILEPOST	LATITUDE (N)	LONGITUDE (W)
Start	40.50	40° 51' 32"	75° 20' 15"
End	43.67	40° 53' 49"	75° 22' 14"

The source of water supply for the Palmerton Loop project is a private pond located adjacent to the Buckwha Creek just east of the pipeline crossing at Kunkletown Road. Water used for internal pipe cleaning and hydrostatic testing of the mainline section of the pipeline will be discharged back into the same unnamed pond. A 1,500 foot segment of the pipeline will be installed below Aquashicola Creek using Direct Pipe, a trenchless construction method. The Direct Pipe segment will be cleaned and hydrostatically tested independently from the rest of the mainline section. Water used for internal cleaning and hydrostatic testing of the Direct Pipe segment of the loop will be discharged to the land surface at two locations within the right-of-way near the Direct Pipe segment.

The Palmerton Loop and the associated surface water withdrawal and discharge locations are located within the Aquashicola and Buckwha Creeks drainage area of the Lehigh River watershed and are within the drainage area to the section of the non-tidal Delaware River known as the Lower Delaware, which is designated as Special Protection Waters. Aquashicola Creek is classified by the PADEP as High Quality (HQ) supporting Cold Water Fishes (CWF) and migratory fishes (MF). This section of the Buckwha Creek is classified by the PADEP as supporting cold water/migratory fishes (CWF/MF).

The specific withdrawal and discharge locations are as follows:

WITHDRAWAL SITE	LATITUDE (N)	LONGITUDE (W)
Unnamed Private Pond	40° 52' 50"	75° 21' 19"

DISCHARGE SITES	LATITUDE (N)	LONGITUDE (W)
Unnamed Private Pond (Mainline cleaning and hydrostatic test water)	40° 52' 50"	75° 21' 19"
Land Discharge East of Direct Pipe Entry Location* (Direct Pipe pre-installation hydrostatic test water)	40° 51' 35"	75° 20' 12"
Land Discharge Near Direct Pipe Exit Location* (Direct Pipe cleaning and post-installation hydrostatic test water)	40° 51' 47"	75° 20' 29"

*The docket holder must submit final construction plans confirming the locations of the land surface discharge points (see condition C.I.b.)

Transco's Northeast Supply Link project also involves modifications to existing Compressor Station 515, located approximately 2.5 miles northwest of the intersection of Route 115 and River Road at Leidy M.P. 68.8 in Buck Township, Luzerne County, Pennsylvania. The existing compressor station is located on the drainage divide of Shades Creek and Stony Run drainage areas in the Lehigh River watershed within the drainage area to the section of the non-tidal Delaware River known as the Lower Delaware, which is classified by the Commission as Special Protection Waters (SPW).

The specific location of the compressor station is as follows:

Compressor Station	LATITUDE (N)	LONGITUDE (W)
Compressor Station 515	41° 10' 20"	75° 40' 18"

3. Area Served. Project water withdrawals and discharges are temporary and will serve only the Palmerton Loop portion of the docket holder's Northeast Supply Link Project for the internal cleaning of pipe, hydrostatic testing, mixing with bentonite to make drilling fluid for Direct Pipe operations, trench dewatering, and water body crossing surface water withdrawals as described in the Description section below. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. Physical features.

a. **Design criteria.** Transco is expanding segments of its existing interstate natural gas pipeline system to provide additional firm transportation service capacity. The new pipeline will provide transportation of additional gas quantities to customers in the region. The Palmerton Loop project consists of the installation of a 3.17 mile length of new 42-inch diameter steel natural gas pipeline extending the Leidy Line-D adjacent to the docket holders existing Leidy Lines A-C. The Palmerton Loop project involves the unloading and storage of pipe in the project vicinity as it is received from the pipe mill; clearing and grading of new and existing pipeline right-of-way; hauling pipe to the right-of-way; welding, coating and inspecting the pipeline; excavating the trench; lowering the pipeline in place; backfilling the excavations; performing a hydrostatic pressure test of the completed pipeline; and restoring the right-of-way and disturbed areas.

The project will require temporary facilities to be established for the duration of the project for use as a company inspection office, contactor office, vehicle parking, equipment parking, and maintenance yard, pipe storage yards, and construction access roads.

The work was planned to utilize as much of the existing right-of-way as practical. Safety considerations require limiting the frequency and type of construction activity over the adjacent operating pipelines. Additional land has been acquired from adjoining properties for new permanent right-of-way needed to operate and maintain the pipeline and for temporary workspace needed to widen the construction work corridor. Other additional temporary workspace has been acquired off right-of-way for the temporary facilities listed above.

The Palmerton Loop project will require up to a total of 1.774 mg of water which will be used for Direct Pipe installation operations, internal pipeline cleaning and hydrostatic testing of the Direct Pipe segment and mainline sections. All water will be sourced from the unnamed pond adjacent to Buckwha Creek. However, the docket holder indicated that a back-up source of water from a public source will be obtained in the event that site conditions at the time of water use do not support withdrawal of water from the pond. Water used for the mainline section of the Palmerton Loop will be transferred directly from the pond to the pipeline using hard pipe and a temporary manifold installed on the pipeline in the vicinity of the pond. Because of its distance from the source pond, all water used at the Direct Pipe segment will be transported by truck to the Direct Pipe segment. Specific water requirements for the various activities are described in the following paragraphs.

A total of 0.356 mg of water will be mixed with bentonite to make drilling fluid for the 1,500-foot segment of natural gas pipeline installed below Aquashicola Creek using the Direct Pipe construction method. The segment of pipeline installed using the Direct Pipe construction method will be internally cleaned once and hydrostatically tested twice independently from the rest of the mainline pipeline sections. The first hydrostatic test, requiring 0.097 mg of water, is conducted prior to the installation of the Direct Pipe segment. Following installation, the Direct Pipe segment is internally cleaned by running 500-linear feet of wash water (0.036 mg) between two bi-directional squeegee “pigs”. Following the internal cleaning, a second hydrostatic test, requiring 0.094 mg of water, is conducted prior to connecting the ends of the Direct Pipe

segment to the mainline section. No additives will be used in the wash or fill water. Because of the Direct Pipe segment location, the Direct Pipe segment will be tested again as part of the mainline hydrostatic testing.

Once the mainline section of pipeline is complete, hydrostatic testing of the new Palmerton Loop will be performed. Prior to filling and pressure testing, the pipeline will be internally cleaned by running 500-linear feet (0.036 mg) of wash water between two bi-directional squeegee “pigs”. No additives will be used in the wash or fill water. Water needs for hydrostatic testing of the Palmerton Loop vary depending on the sequence it is tested. For purposes of hydrostatic testing, the pipeline will be split into two sections: Section 1A and 1B, with Buckwha Creek forming the division between the two sections. The total fill volumes of sections 1A and 1B are 0.495 mg and 0.660 mg, respectively. There are three options for the sequencing of the hydrostatic testing: 1) Fill section 1B, test, and then push water into Section 1A; 2) Fill section 1A, test, then push water into Section 1B; or 3) Fill one pipe section, test, and discharge the water to the pond then fill the other section, test, and discharge the water back to the pond. The option will depend on the schedule and completion times of the two sections of pipeline. If both sections can be tested within a 1 week period, the docket holder would utilize options 1 or 2, which would reduce the volume of water withdrawals and discharges needed for the hydrostatic testing of the pipeline.

b. Facilities.

All surface water withdrawals from the unnamed pond will be metered.

The water will not be treated prior to use.

The project intake and point of discharge are located within the 100-year floodplain.

The source of water used at the Palmerton Loop project as well as the point of final discharge for the majority of the cleaning and hydrostatic test water is an unnamed pond located adjacent to the Buckwha Creek. Based on historic aerial photographs, the pond was constructed sometime between 1950 and 1960. The pond was constructed with an earthen berm that extends around the northern (upgradient), northern and western (downgradient) sides of the pond and ties in with the higher natural elevations located south of the pond. The surface area of the pond is approximately 10 acres and its depth at points is estimated to be greater than 6 feet. The storage capacity of the pond is estimated at approximately 20 million gallons of water.

It is reported that the pond initially contained inflow and outflow pipe structures in the berm that diverted at least a portion of the Buckwha Creek flows directly through the pond. If they were installed, these pipes are no longer visible. They may also have either been removed or have filled with sediment and are no longer functional. Currently, the majority of Buckwha Creek flow is diverted northward by the eastern (upgradient) pond berm where it flows in a channel around the outside of the northern pond berm parallel to Kunkletown Road. The creek continues around the perimeter of the pond and flows south for approximately 200 feet then turns west and flows through a culvert beneath Lakeside Drive.

It is probable that a small portion of water from Buckwha Creek seeps through the berm and into the pond. This seepage likely coupled with the discharge of shallow groundwater into the pond, flows out of the unnamed pond through a small depression in the western (downgradient berm). The discharge from the pond flows through a series of channels in wetlands west of the pond and contributes to the overall flow in Buckwha Creek downstream of the pond.

The intakes will be located in the pond and screened to minimize the potential entrainment of fish and the rate will be managed to maintain to protect aquatic life. Water used for hydrostatic testing of the two mainline sections will be withdrawn from the pond through floating strainers and a 6-inch pump with a rating of 2,000 to 2,500 gpm. The water will be transferred to the pipeline using hard pipe and a temporary manifold installed in the pipeline near the pond. Water used for drilling fluid, internal cleaning and hydrostatic testing of the Direct Pipe segment will be withdrawn from the pond through floating strainers and two smaller 3-inch pumps with a rating of 300 gpm each (total of 600 gpm). This water will be transported to the Direct Pipe segment by trucks. All withdrawals from the pond will be measured with a totalizing flow meter. All pumps used near the pond will be located within secondary containment; other equipment will be staged on mats or within a secondary containment. No refueling will occur within 100 feet of the pond or wetland. Operations within the withdrawal area will use appropriate best management practices for erosion and sedimentation controls.

Discharge Locations

Water used for internal cleaning and hydrostatic testing of the mainline sections of the pipeline will be removed from the pipeline and discharged to the unnamed pond adjacent to Buckwha Creek. Depending on the sequence of hydrostatic testing, up to 1.191 mg of water will be discharged back to the unnamed pond. The discharge rate will be dependent upon site and environmental conditions and may be discharged over a 1 to 3 day period. The maximum discharge rate will be limited to 2,500 gpm. A splash plate will be used at the end of the discharge line to dissipate the energy over the surface of the pond and to reduce potential erosion. Properly trained personnel will be on site during discharge operations. Prior to discharging the internal cleaning water, a sample will be collected and analyzed for PADEP PAG-10 parameters. If the water meets PADEP standards, the water may be sent through a filtration system and discharged to the pond. If the cleaning water does not meet PADEP standards, the water will be taken to the Passaic Valley Sewerage Commission in Newark, New Jersey.

Water used for the internal cleaning and hydrostatic testing of the Direct Pipe segment of the Palmerton Loop will be discharged to one of two land surface locations located in the right-of-way in the vicinity of the entry and exit points of the Direct Pipe segment. The water will be discharged through filter bags and a dewatering structure and monitored. The water used for mixing with bentonite and making drilling fluid for the Direct Pipe segment will be collected and disposed of offsite as described in Section 4.c. of this docket.

Palmerton Loop Pipeline

Transco's Palmerton Loop will extend the Leidy Line D an additional 3.17 miles from M.P. 40.50 to M.P. 37.67 adjacent to the existing Leidy pipelines. The project has been

engineered to provide an additional 250,000 dekatherms of natural gas transportation service. The Palmerton Loop consists of 42-inch diameter coated steel natural gas pipeline; the majority of which will be installed using standard pipeline construction methods. Special construction procedures will be used when working in wetlands and when crossing water bodies as described in the Findings Section of this docket. Generally, the new pipe line is located at a distance of 25 feet from the nearest existing natural gas pipeline at the Palmerton loop section.

During construction, the Palmerton loop will affect approximately 39.6 acres of land. This total includes all temporary work space along the pipeline, contractor pipe yards, and access roads. Following construction, 30.1 acres of the disturbed land will be allowed to revert to prior uses. The remaining 9.5 acres located along the new pipeline would be retained as new permanent right-of way. Information regarding disturbance on land is discussed in the Findings Section of this docket.

Appurtenant Aboveground Facilities

Natural gas pipelines require appurtenant aboveground facilities known as mainline valves (MLV's) and pig launcher/receivers for pipeline operation and maintenance. These facilities are located in the pipeline right-of-way, directly above the natural gas pipelines. The existing Leidy Line where the Palmerton loop will be installed contains three existing MLV and pig launcher facilities. The Palmerton loop project involves the relocation of one existing MLV and pig launcher facility currently located at M.P. 40.5 to a new location at M.P. 43.7. The project also involves modifications to one existing MLV located southeast of Dogwood Lane at M.P. 42.8.

Construction of the new MLV and pig launcher/receiver facility and the modifications to the existing MLV facility requires clearing and grading, installing underground piping, testing the piping and control equipment, cleaning up the work area, graveling the site, and fencing the facilities. The MLV and pig launcher/receiver site at M.P. 40.5 will be removed and the land restored to pre-existing agricultural conditions. The total amount of land permanently disturbed by the new and modified MLV facilities is approximately 1 acre.

Access Roads and Contractor/Pipe Yards

Public roads and the construction right-of-way will be used for primary access to the Palmerton Loop. The docket holder will also construct two new temporary roadways and modify three existing roadways for temporary access during construction. One existing roadway will be permanently maintained for access to the existing mainline valve site. A total of 1.8 acres of land will be affected by the access roads during construction of the Palmerton Loop. After construction, all but one permanent roadway will be removed and the land will be allowed to revert to preconstruction conditions.

Two contractor/pipe yards, located outside of the pipeline construction right-of-way, will be used during construction of the Palmerton Loop to store machinery, equipment, construction material, and pipe. The Meixell Valley Road Pipe Storage/Contractor Yard is 13.8 acres and is located on agricultural land at the northern end of the Palmerton Loop. The 12.8 acre Mount Effort Pipe Storage Yard is a commercial-industrial property located in Tunkhannock Township,

Monroe County. Following construction of the Palmerton Loop, the storage yards will be returned back to previous land use conditions.

Compressor Station 515 Modifications

An additional component of the Northeast Supply Link project involves the modification to the docket holder's existing Compressor Station 515, which is located in Buck Township, Luzerne County, Pennsylvania. Transco is installing a new 16,000 horse power (hp) gas turbine compressor unit to the existing six compressor units, which currently provide 32,000 hp at the existing compressor station. The compressor would be housed in a new, approximately 32,000 square-foot building addition located on the southern part of the facility. All work would occur within the existing 11.2-acre facility.

c. **Other.** Water withdrawn from the unnamed pond for Direct Pipe drilling will be mixed with bentonite to create the drilling fluid used in drilling activities. No other additives will be used in the drilling process. Used drilling fluids will be disposed of at the Passaic Valley Sewerage Commission facility located in Newark, New Jersey. Hole cuttings, consisting of the solid material removed from the Direct Pipe drilling fluids, will be disposed of at Grinnell Concrete, Inc.; Grinnell Recycling, Inc., in Sparta Township, Sussex County, New Jersey.

d. **Hydrostatic Testing Discharge Permits.** The Palmerton Loop discharge site requires approval of PADEP and the issuance of a PADEP NPDES Permit for the discharge of hydrostatic testing of tanks and pipelines. The PADEP issued NPDES permit No. PAG102281 on April 17, 2013 that includes final discharge limitations for the project discharge of 1.2 mg to the unnamed pond adjacent to Buckwha Creek. The docket holder must apply to PADEP for an amendment to NPDES permit No. PAG102281 for the discharge of 0.227 mg to the right of way land surface. No additives will be used during hydrostatic testing. As required by PADEP and this docket, water samples (grab) shall be taken at the beginning and end of the discharge period and tested for the parameters detailed on TABLE A-1 and A-2 below:

EFFLUENT TABLE A-1: Parameters Included in PADEP Discharge Approval

Palmerton Loop		
PARAMETER	LIMIT	MONITORING
Flow (gpm)	n/a	Monitor and report
Duration (hours)	n/a	Monitor and report
pH (Standard Units)	6 to 9 at all times	2 grab samples per discharge
Total Suspended Solids	60 mg/l	2 grab samples per discharge
Dissolved Oxygen	5 mg/l (minimum at all times)	2 grab samples per discharge
Oil and Grease	30 mg/l	2 grab samples per discharge
Iron	7 mg/l	2 grab samples per discharge
Total Residual Chlorine*	0.05 mg/l	2 grab samples per discharge

* Only if chlorinated water is used

EFFLUENT TABLE A-2: DRBC Parameters Not Included in PADEP Discharge Approval

Palmerton Loop		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids	1,000 mg/l	2 grab samples per discharge

* DRBC Requirement

- e. **Cost.** The overall cost of this project is estimated to be \$677,000.00.

B. FINDINGS

Purpose

The docket holder submitted an Application to the Commission for approval of a one-time discharge of hydrostatic testing water from the docket holder's Northeast Supply Link (NSL) - Palmerton Loop project. The project also involves the withdrawal of surface water for hydrostatic testing and temporary stream crossing activities, internal pipeline cleaning, and Direct Pipe cutting fluid, temporary groundwater withdrawals for trench dewatering, the installation of 3.17 miles of new 42-inch diameter steel natural gas transmission pipeline, the unloading and storage of pipe in the project vicinity as it is received from the pipe mill; clearing and grading of new and existing pipeline right-of-way; hauling pipe to the right-of-way; welding, coating and inspecting the pipeline; excavating the trench; lowering the pipeline in place; backfilling the excavations; performing a hydrostatic pressure test of the completed pipeline; and restoring the right-of-way and disturbed areas. The Palmerton Loop project also requires temporary facilities to be established for the duration of the project for use as a company inspection office, contactor office, vehicle parking, equipment parking, and maintenance yard, pipe storage yards, and constriction access roads.

Groundwater Withdrawals - Trench Dewatering

The potential for groundwater withdrawals exists where dewatering is necessary during trench excavation operations. Dewatering will be necessary if the trench intersects the water table, which would be most likely to occur within wetland areas and adjacent to stream channels. Trench dewatering activities are usually completed in a few days within a particular pipe installation location; therefore, potential impacts are expected to be minimal and temporary. Transco must minimize the amount of time that the trench will remain open to the extent practicable. Water from dewatering activities will be discharged through filter bags or hay bale dewatering structures to minimize turbidity and erosion during dewatering operations.

Surface Water Withdrawal Procedures and Schedule

There is no indication that the pond used for hydrostatic testing water supply is directly connected to the Buckwha Creek surface water flows. Therefore, typical stream statistics and passby flow requirements are not applicable at the withdrawal location. Withdrawals will rely on water storage in the pond with some inflow of shallow groundwater and surface water seepage through the constructed berm. Based on the surface area and depth of the pond, the pond is estimated to have a storage capacity of 20 million gallons of water. The withdrawal will temporarily reduce the flows of water discharged from the pond, but the surface water flow of Buckwha Creek around the perimeter of the pond would continue.

For comparison purposes, stream flow conditions for Buckwha Creek were evaluated at a point directly downstream of the pond. The estimated area of the drainage basin upstream of the proposed withdrawal location is 1.78 square miles. USGS Pennsylvania StreamStats was used to estimate the seven-day, 10-year (7Q10) low and annual mean flows near the withdrawal location. The calculated 7Q10 rate and the mean flow rate near the proposed withdrawal location are 0.14 cubic feet per second (cfs) (0.09 mgd) and 3.1 cfs (2.0 mgd), respectively.

The docket holder will comply with the following operational procedures to be followed at the unnamed pond water withdrawal site:

Water Withdrawal Equipment Setup

- Withdrawal rates will be measured and recorded during withdrawal operations.
- Pumps and other equipment will be either skid or trailer mounted to facilitate relocation in the event of high water conditions.
- Water withdrawal equipment will be located outside of a designated floodway or in an area at least 25 feet from the top of bank at stream edge if a floodway is not designated.
- Pumps will be placed in secondary containment in order to prevent potential fuel or oil discharges from being discharged.
- The water intake and piping will be located in an area adjacent to the pond edge where removal can be achieved within a few hours.

Procedures for Equipment Removal

- Upon initiation of water withdrawal activities, weather forecasts will be monitored on a daily basis to identify any forecasted precipitation events that have the potential for causing flood conditions.
- On a daily basis, hydraulic conditions at the withdrawal site will be observed.
- During forecasted storm or rainfall events that have the potential to result in out of bank flooding, stream observations will be made a minimum of a three times a day to identify the change in stream elevations.
- If flood conditions are forecast, all equipment will be moved to high ground in a designated area outside the floodplain. This area will be identified prior to initiation of the project.
- Equipment removed during potential flood conditions will be returned to the withdrawal site once stream elevations have dropped below flood stage; ground conditions are capable of supporting vehicular traffic and the water intake and piping can be placed in a safe manner.

The docket holder is planning to perform water withdrawals for hydrostatic testing between June and July 2013. The docket holder must notify the DRBC approximately two weeks before the planned withdrawal will occur. Water will be withdrawn at a maximum rate of 2,500 gpm not to exceed the allocation limit and the withdrawal apparatus shall be secured at

least 1 foot off the water body bottom to eliminate sediment intake as provided in Decision section C.I.e.

Stream Crossing Water Diversions

Because of the crossing method, surface water withdrawals are necessary at two of the four water body crossings. The withdrawals would occur at the crossings of Buckwha Creek and at an unnamed tributary of Buckwha Creek. Withdrawals may also be necessary at a third water body crossing of a separate unnamed tributary to Buckwha Creek when installing a temporary culvert for equipment crossing. The pipeline crossing of Buckwha Creek is located just south of Kunkletown Road at the unnamed pond near M.P. 42.3; the pipeline crossing of the unnamed tributary to Buckwha Creek is located near Dogwood Lane at M.P. 42.7; and the equipment crossing of the unnamed tributary to Buckwha Creek is located along the pipeline approximately 500 feet north of Kunkletown Road at M.P. 42.4.

The stream crossings will be completed using the dry cut with dam and pump construction method. This method temporarily diverts stream flow around the work area to minimize contact between stream water and the trench excavation and to minimize sediment suspension during trench excavation, pipeline installation and backfill activities. This method consists of installing dam structures consisting of steel plates, sandbags and plastic liners upstream and downstream of the proposed pipeline trench to create a dry working area prior to the excavation of the pipe trench across the stream channel. Pumps are used to convey the impounded water above the upstream dam through hoses around the active working area and discharged back into the stream channel downstream of the lower dam. The pump intake will be screened and the discharge end of the hose will contain an energy dissipating device to minimize erosion, scouring and turbidity. Additional pumps will be available on site if needed. After the stream has been temporarily diverted around the work area, the trench is excavated and the pipeline installed. The trench is backfilled to pre-construction contours and the stream banks are restored prior to removing the dams and pumping equipment and restoring water flow.

The mean streamflow of Buckwha Creek in the vicinity of the pipeline crossing is 3.07 cubic feet per second (cfs) or 1.98 million gallons per day (mgd) as estimated by USGS StreamStats. Transco estimates that the stream will be diverted for 3 to 7 days, therefore during average flow conditions up to 13.86 mg of water will be diverted from the running stream to the stream down-gradient of the work area. The average flows in the unnamed tributaries to Buckwha Creek at the pipeline crossing and at the equipment crossing are estimated at 0.12 cfs (0.08 mgd) and 0.07 cfs (0.04 mgd), respectively. However, due to the small drainage areas (less than 0.1 square mile) the flows estimated by StreamStats may be erroneous.

The dry crossing with dam and pump method will minimize sedimentation resulting from the trenching activities. The primary water-related impacts associated with this crossing method will occur in the stream segment between the two dam structures, which will be temporarily dewatered during the installation of the pipeline. Because the water diverted from above the work area will be diverted immediately down-gradient of the work area, downstream flow rates will not be affected by the diversion. The primary impact downstream would be related to sedimentation resulting from the installation and removal of the diversion dams. Additionally, scouring may also occur at the point of discharge. The pump intake will be screened and the

discharge end of the hose will contain an energy dissipating device to minimize erosion, scouring and turbidity.

Discharge of Hydrostatic Testing Water

After the hydrostatic tests of the mainline sections are complete, the hydrostatic test water will be discharged back to the unnamed pond adjacent to Buckwha Creek. A splash plate will be installed on the discharge line to dissipate the energy over a larger surface of the pond. The hydrostatic testing water discharged to the land surface at the Direct Pipe segment of the pipeline will be discharged through filter bags and dewatering structures to minimize sediment and erosion. No significant water quality impacts are anticipated as a result of discharge from hydrostatic testing. The new pipeline will be free of chemicals or lubricant and no additives would be used in the wash or hydrostatic test water.

Land Disturbance

The Palmerton loop will affect a total of 39.6 acres of land during the construction phase of the project of which 9.5 acres of land will remain disturbed during its operation. After construction, the land within the construction right-of-way and additional temporary workspace would be allowed to recover to pre-construction conditions. Disturbed land would be revegetated in accordance with Transco's approved Erosion and Sediment Control plans. Additionally, topsoil and sub-soils will be segregated, where appropriate, in accordance with the Project-specific Plan, and returned as nearly as possible to their original soil horizon locations.

During construction, the project will disturb a total of 11.1 acres of forested land. After construction, 7.6 acres of the forest land located in the construction right-of-way would be allowed to recover to pre-construction conditions. Because of the required regular vegetation maintenance within the permanent right-of-way of the pipeline, 3.5 acres of forest lands would be permanently converted to open land with herbaceous cover.

Stream Encroachments

The encroachment on streams involves the temporary construction of dams and the placement of culverts in order to facilitate construction of the natural gas pipeline. The Palmerton Loop crosses four water bodies: Aquashicola Creek, Buckwha Creek, and two unnamed tributaries to Buckwha Creek. The section of pipeline under Aquashicola Creek will be installed using Direct Pipe method. Buckwha Creek (25-foot width) and one unnamed tributary to Buckwha Creek (6-foot width) involve dry open cut with dam and pumping; these crossings will temporarily disturb 0.21 acres and 0.02 acres of the respective streambeds. The other unnamed tributary to Buckwha Creek (10-foot width) crossing is for a temporary culvert that would be used for equipment crossing. The culvert will be removed following the completion of the pipeline project.

On February 11, 2013, the docket holder received joint approval of Pennsylvania State Programmatic General Permit (PASPGP-4) from the USACE and PADEP for the activities that will be conducted in within streams and wetland areas.

Reservoir, Proposed Reservoir or Recreation Project Areas

The Palmerton Loop does not cross any reservoir, proposed reservoir or recreation project areas designated in the Comprehensive Plan.

Wetland Disturbance

The Palmerton Loop project will disturb one wetland area where the pipeline crosses wetlands surrounding Buckwha Creek just south of Kunkletown Road between M.P. 42.2 and 42.3. The workspace necessary in this area will temporarily affect approximately 0.6 acres of wetlands during the construction phase of the project. After construction of the pipeline, the majority of the affected wetlands would be restored to their original vegetation type. However, because of vegetation maintenance requirements proximal to the pipeline route, approximately 0.1 acres of originally forested wetlands would be permanently converted to scrub-shrub or emergent wetland types.

To minimize impacts in areas where the pipeline might divert drainage or block the normal flow of water through a wetland, cross-drainage will be provided to maintain the hydrologic characteristics of the wetland. Additionally, trench plugs will be installed at the entrance and exit of the pipeline through the wetland to ensure that the wetland is not drained along the pipeline. Timber mats will be used as a working surface in the wetland area to minimize rutting and soil compaction. Any confining layers that were breached during the construction will be restored during backfilling. Wetland restoration will involve returning contours to pre-construction levels and removing temporary control measures.

Wetlands are also present where the pipeline will cross the Aquashicola Creek near M.P. 40.7; however, these wetlands will not be disturbed by the crossing. This wetland area supports bog turtle habitat and is considered an exceptional value wetland. Additionally, Aquashicola Creek is classified by the PADEP as a HQ CWF-MF stream and is also considered by the PAFBC as a Class A Trout Stream. In order to avoid disturbance to the stream, wetland, and the bog turtle habitat areas, the docket holder will install the pipeline in this area using the Direct Pipe method. The Direct Pipe method is a trenchless technology that is completed by using a precisely guided boring machine that installs the gas pipeline as it tunnels through the ground in one pass. The pipeline would be installed approximately 50 feet below Aquashicola Creek and the surrounding wetlands. Transco estimates that the drilling will take approximately 2 to 4 weeks. The entry and exit points are located outside of the wetland area and no wetlands surrounding the Aquashicola Creek will be affected by the Palmerton Loop project.

On February 11, 2013, the docket holder received joint approval of Pennsylvania State Programmatic General Permit (PASPGP-4) from the USACE and PADEP for the activities that will be conducted in within streams and wetland areas.

Floodplain Regulations

The Palmerton Loop pipeline will cross Buckwha Creek and its associated 100-year floodplain at a location just south of Kunkletown Road and the unnamed pond. In this area, the pipeline will be installed across Buckwha Creek in a dry open cut trench using a dam and pump method to temporarily divert surface water flow around the water body crossing. Transco estimates that the Buckwha Creek crossing will take up to seven days to complete. During construction, temporary erosion and sediment control structures will be placed within the floodplain. Other activities that will occur within the floodplain are the withdrawal and discharge of hydrostatic test water. The project does not propose any permanent surficial structures within the 100-year floodplain. The pipeline will be installed at a minimum depth of 5

feet below the ground surface. Section 6.3.4 of the Commission's Floodplain Regulations allows certain uses, including pipelines, within the floodway to be authorized by special permit. This docket authorizes the pipeline to be constructed under the geographical boundaries of the floodway of Buckwha Creek.

The floodplain surrounding the Aquashicola Creek will be avoided through the use of the Direct Pipe installation method, which will place the new natural gas line at a depth of approximately 50 below the stream and associated floodplain. No clearing, construction activities, or soil stockpiling will occur within the Aquashicola Creek floodplain and surrounding wetland areas. The entry and exit working points for the Direct Pipe drilling are located outside of the 100-year floodplain.

The Commission's Floodplain Regulations do not allow the placement of spoil, fill or solid waste within the floodway. FEMA has not delineated the Buckwha Creek floodway. During construction of the pipeline, spoil from the excavation will be temporarily placed along the trench within the flood hazard area surrounding Buckwha Creek. The docket holder will implement erosion and sediment controls measures to minimize the potential for the spoil entering Buckwha Creek. Additionally, the placement of spoil is temporary and following the completion of backfilling the spoil will no longer be present in the floodplain. However, the possibility of spoil entering the waterbody would increase if flooding conditions occur during the trenching operations conducted within the floodplain of Buckwha Creek. Condition C.I.1 requires that the docket holder monitor short and long-term weather forecasts prior to conducting any work in the floodplain of Buckwha Creek. No work should commence within the delineated floodplain if weather forecasts or observed conditions indicate the possibility of flooding conditions are likely to occur during the scheduled construction time.

Special Protection Waters

In 1992, the DRBC adopted Special Protection Waters requirements, as part of the DRBC *Water Quality Regulations* (WQR), designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap were classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area.

On July 16, 2008, the DRBC approved amendments to its *Water Quality Regulations* that provide increased protection for waters that the Commission classifies as Special Protection Waters. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for Special Protection Waters designation and clarity on definitions and terms were updated for the entire program.

Article 3.10.3A.2.e.1). and 2). of the *Water Quality Regulations, Administrative Manual - Part III*, states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of Special Protection Waters must submit for approval a Non-Point Source

Pollution Control Plan (NPSPCP) that controls the new or increased non-point source loads generated within the portion of the project's service area which is also located within the drainage area of Special Protection Waters. The project is located within the drainage area to Special Protection Waters. Since this project does entail construction, there are potentially new or increased non-point source loads associated with this approval, the non-point source pollution control plan requirement is applicable at this time.

The docket holder submitted the following plans to the Commission:

“Transcontinental Gas Pipe Line Company, LLC, Soil Erosion & Sediment Control Plans, Northeast Supply Link Project, Proposed 42” Leidy Line “D” Extension (Palmerton Loop), 3.17 MI. – M.P. 40.50 to M.P. 43.67, Monroe County, Pennsylvania”, Sheet 1 through 22, dated 1/12/12, Revision 2, prepared by URS Corporation.

“Transcontinental Gas Pipe Line Company, LLC, Post-Construction Stormwater Management Plan, Northeast Supply Link Project, Proposed 42” Leidy Line “D” Extension (Palmerton Loop), 3.17 MI. – M.P. 40.50 to M.P. 43.67, Monroe County, Pennsylvania”, Sheet 1 through 22, dated 1/12/12, Revision 2, prepared by URS Corporation.

The Monroe County Conservation District approved the project Erosion and Sedimentation Control Plan and Post-Construction Stormwater Management Plan and issued an Erosion and Sediment Control General Permit for Earth Disturbance Associated with Oil and gas Exploration, Production, Processing, or Treatment Operations or Transmission Facilities (ESCGP-1), Permit No. 4512801, on October 25, 2012.

Commission staff reviewed the erosion and sediment control and post-construction plans and determined that the approved plans fulfill the Non-Point Source Pollution Control Plan requirements for projects located in Special Protection Waters.

The project meets the conditions outlined in FERC's Wetland and Waterbody Construction and Mitigation Procedures and the Upland Erosion Control, Revegetation and Maintenance Plan except in areas where the docket holder has requested a waiver from specific conditions several locations due to site specific conditions. The modifications to FERC plans and procedures include an increased width of construction right of way from 75 feet to 90 feet in wetlands, temporary workspace encroachments on wetlands and waterbodies and vegetated stream buffers and the placement of trench spoil within 10 feet of waterbodies.

Notification and Final Site Construction Plans

The withdrawal and discharge sites will be restricted to the operations associated with the function of water withdrawal and hydrostatic testing water discharge. At least 14 days prior to any withdrawals or discharges at the site, the docket holder must provide written notice to the Commission. The notice must include a tentative schedule of the withdrawals and discharges described in this docket. The notice must also include the specific locations of the land surface discharge points in the vicinity of the Direct Pipe segment of the pipeline.

Required Project Approvals

The following table lists the required approvals related to water resources in the Delaware River Basin for the Palmerton Loop project, and their statuses:

Agency	Approvals, Licenses or Permits	Status of Approval
Local Agencies		
Monroe County Conservation District	Erosion & Sedimentation Control Plan and Post-Construction Stormwater Management Plan approval. (ESCGP-1)	Approval received October 25, 2012
Commonwealth of Pennsylvania Agencies		
PA Department of Environmental Protection (PADEP)	NPDES Permit – Hydrostatic Testing of Tanks and Pipelines	Approval received April 17, 2013 for discharge to unnamed pond adjacent to Buckwha Creek.
Pennsylvania Department of Transportation	Highway Occupancy Permit for Upper Smith Gap Road	Pending
Pennsylvania Department of Transportation	Highway Occupancy Permit for Kunkletown Road	Pending
Pennsylvania Department of Conservation & Natural Resources (PADCNR)	Consultation	NA
Pennsylvania Fish & Boat Commission (PAFBC)	Consultation	NA
PA Game Commission (PGC)	Consultation	NA
PA Historical and Museum Commission	Consultation	NA
USACE and PADEP Joint Approvals		
USACE and PADEP	Pennsylvania State Programmatic General Permit (PASPGP-4)	Approval received February 11, 2013
Federal and Other Agencies		
Federal Energy Regulatory Commission	Certification of Public Convenience and Necessity	Issued on November 2, 2012
U.S. Fish & Wildlife Service (USFWS) - Pennsylvania	Consultation	NA
Advisory Council on Historic Preservation	Consultation	NA

Condition I.a. in the DECISION section of this docket conditions Commission approval is contingent upon the docket holder obtaining and complying with the terms of these approvals.

Other

DRBC estimates that the project withdrawals, used for the purpose of hydrostatic testing, result in a consumptive use of less than 30 percent of the total water use for that purpose. The definition of consumptive use is defined in Article 5.5.1.D of the Administrative Manual – Part III – Basin Regulations – Water Supply Charges.

The project is designed to conform to the requirements of the Water Code and Water Quality Regulations of the DRBC.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

C. DECISION

I. Effective on the approval date for Docket No. D-2013-04-1 below, the project and the appurtenant facilities described in Section A “Physical Features” of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP, USACE and other local agencies (counties, municipalities, etc.) and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s. Commission approval of the project is contingent on the approval of these permits.

b. The docket holder shall notify the Commission at least fourteen (14) calendar days prior to conducting withdrawals and discharges described in this docket. The notice shall include a tentative schedule of the withdrawals and discharges described in this docket. The notice shall also include the specific locations of the land surface discharge points in the vicinity of the Direct Pipe segment of the pipeline.

c. If the docket holder proposes to utilize a source of water from a public source, the docket holder shall provide the Commission with the name and location of the source and obtain the written approval of the Executive Director prior to withdrawal and transport of the water to the project site.

d. The withdrawal site and operational records shall be available at all times for inspection by the DRBC.

e. The withdrawal sites shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

f. The withdrawal from the surface water source shall not exceed 1.774 million gallons. The withdrawal apparatus shall be secured at least 1 foot off the water body bottom to eliminate sediment intake. No withdrawal shall be pumped above the maximum instantaneous rate and allocations as indicated below:

INTAKE	MAXIMUM INSTANTANEOUS RATE	ALLOCATION NOT TO EXCEED A TOTAL OF
Unnamed Pond	2,500 gpm	1,774,000 gallons

g. The docket holder is permitted to provide the water approved in this docket for Direct Pipe drilling, internal pipe washing, and hydrostatic testing purposes as described in this docket. Any expansion beyond those purposes in this docket is subject to DRBC review and approval in accordance with Section 3.8 of the Compact.

h. The project withdrawals shall be metered with an automatic continuous recording device that measures to within 5 percent of actual flow. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted if maintenance of the 5 percent performance is not technically feasible or economically practicable. A record of daily withdrawals shall be maintained, and total usage shall be reported to the DRBC and PADEP within one month of the conclusion of the withdrawal activity.

i. Sound practices of excavation, backfill and reseedling shall be followed to minimize erosion and deposition of sediment in streams from any new facilities or repair related construction.

j. Water withdrawn from the withdrawal site shall only be transported in water hauling and storage tanks that are free of contaminants. Prior to the transfer of any water to a water hauling vehicle or storage tank, the docket holder will verify that the water tank interior is clean and that the tank is dedicated for the use of hauling fresh water.

k. With the exception of bentonite and water, no other additives shall be used in the Direct Pipe drilling fluid. Used drilling mud and solids from the drilling process shall be disposed of at a state-approved disposal facility.

l. The docket holder shall monitor short and long-term weather forecasts prior to conducting any work in the floodplain of Buckwha Creek. No work shall commence within the delineated floodplain if weather forecasts or observed conditions indicate the possibility of flooding conditions are likely to occur during the scheduled construction time.

m. No additives shall be used in the wash or fill water when internally cleaning or hydrostatic testing the pipeline. A water sample shall be collected from the used wash water and analyzed for PADEP required parameters, prior to any discharge of the wash water. If the water quality does not meet state standards, the wash water shall be disposed of at a state-approved disposal facility.

n. The docket holder is permitted to discharge hydrostatic testing wastewater as defined in this docket at a maximum rate of 2,500 gpm. Total discharge at the pond and land surface discharge locations shall not exceed 1.418 mg and 0.227 mg, respectively. No other discharges shall occur at the hydrostatic discharge sites approved in this docket.

o. The docket holder shall discharge hydrostatic testing wastewater in such a manner and at such a rate as to avoid discharge to any water body, injury or damage to fish or wildlife and shall avoid any injury to public or private property.

p. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

q. Within 30 days of completion of construction of the approved project, the docket holder is to submit to the attention of the Project Review Section of DRBC a Construction Completion Statement (“Statement”) signed by the docket holder’s professional engineer for the project. The Statement must (a) either confirm that construction has been completed in a manner consistent with any and all DRBC-approved plans or explain how the as-built project deviates from such plans; (b) report the project’s final construction cost as such cost is defined by the project review fee schedule in effect at the time application was made; and (c) indicate the date on which the project was (or is to be) placed in operation. In the event that the final project cost exceeds the estimated cost used by the applicant to calculate the DRBC project review fee, the statement must also include (d) the amount of any outstanding balance owed for DRBC review. Such outstanding balance will equal the difference between the fee paid to the Commission and the fee calculated on the basis of the project’s final cost, using the formula and definition of “project cost” set forth in the DRBC’s project review fee schedule in effect at the time application was made.

r. This approval for the withdrawal and discharge of surface water for hydrostatic testing shall expire one year from the docket approval date below unless prior thereto the docket holder has commenced operation of the subject project or has provided the Executive Director with written notification that it has expended substantial funds (in relation to the cost of the project) in reliance upon this docket approval.

s. A complete application must be submitted to the Commission prior to conducting any additional operations not outlined in this approval. Any expansion of the pipeline facilities beyond the scope detailed in this approval shall require DRBC review and approval in accordance with Section 3.8 of the Compact before conducting such operations.

t. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder in order to insure the proper control, use and management of the water resources of the Basin.

u. If the monitoring required herein, or any other data or information demonstrates that the operation of this project significantly affects or interferes with any domestic or other existing uses of ground or surface water, or if the docket holder receives a complaint by any existing ground or surface water users within the zone of influence of the withdrawal, the docket holder shall immediately notify the Executive Director of any complaints by any ground or surface users within the zone of influence of the withdrawal, and unless excused by the Executive Director, shall investigate such complaints. The docket holder should direct phone call notifications of potential well or surface water interference or complaints of interference to the DRBC Project Review Section at 609-883-9500, extension 216. Oral notification must always be followed up in writing directed to the Executive Director. In addition, the docket holder shall provide written notification to all potentially impacted users of

wells or surface water supplies of the docket holder's responsibilities under this condition. Any ground or surface water user which is substantially adversely affected, rendered dry or otherwise diminished as a result of the docket holder's project withdrawal, shall be repaired, replaced or otherwise mitigated at the expense of the docket holder. A report of investigation and/or mitigation plan prepared by a hydrologist shall be submitted to the Executive Director as soon as practicable. The Executive Director shall make the final determination regarding the validity of such complaints, the scope or sufficiency of such investigations, and the extent of appropriate mitigation measures, if required.

v. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

w. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the *Rules of Practice and Procedure*. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

BY THE COMMISSION

DATE APPROVED:

EXPIRATION DATE: May 8, 2015